STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

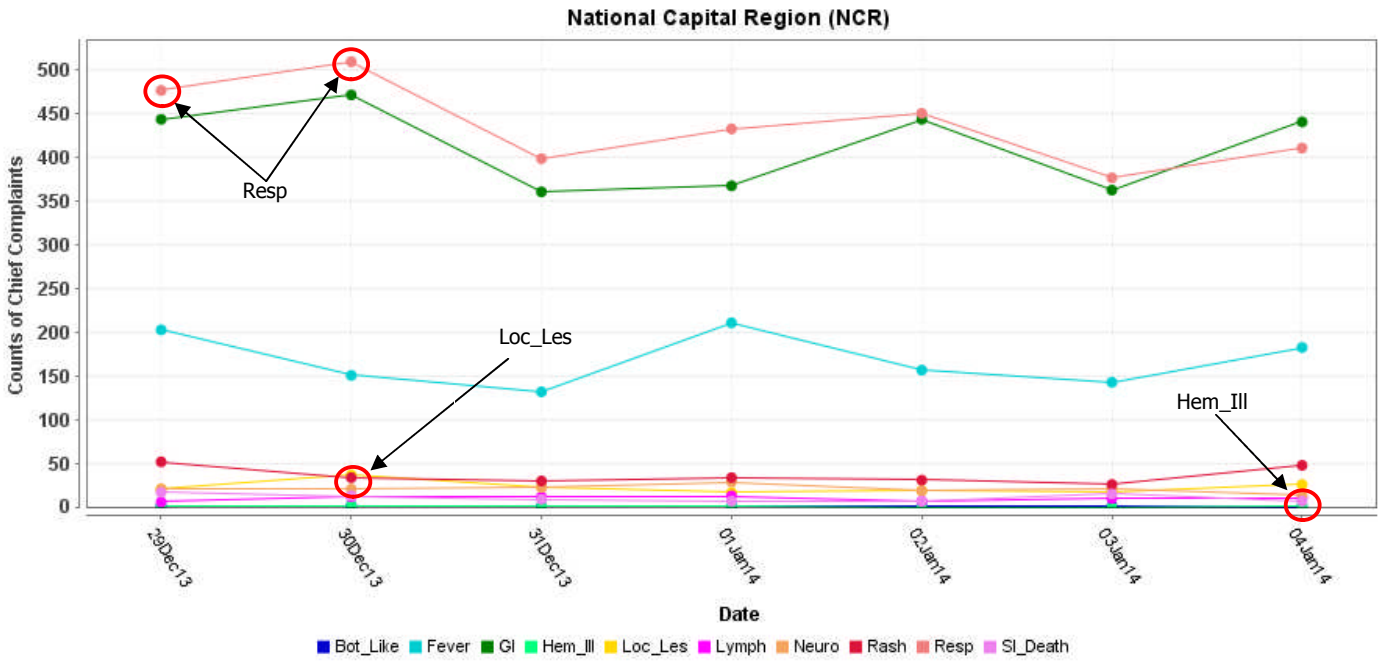
January 10, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:01
Reporting for the week ending 01/04/14 (MMWR Week #01)

CURRENT HOMELAND SECURITY THREAT LEVELS

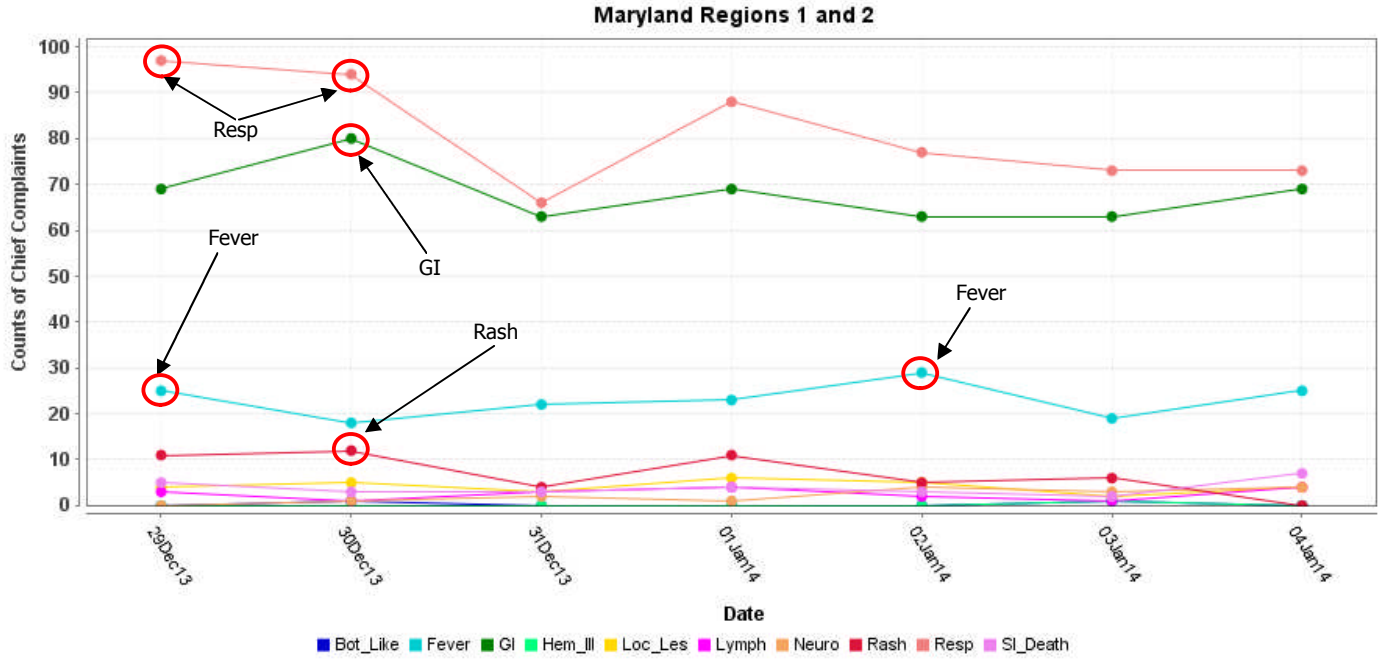
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

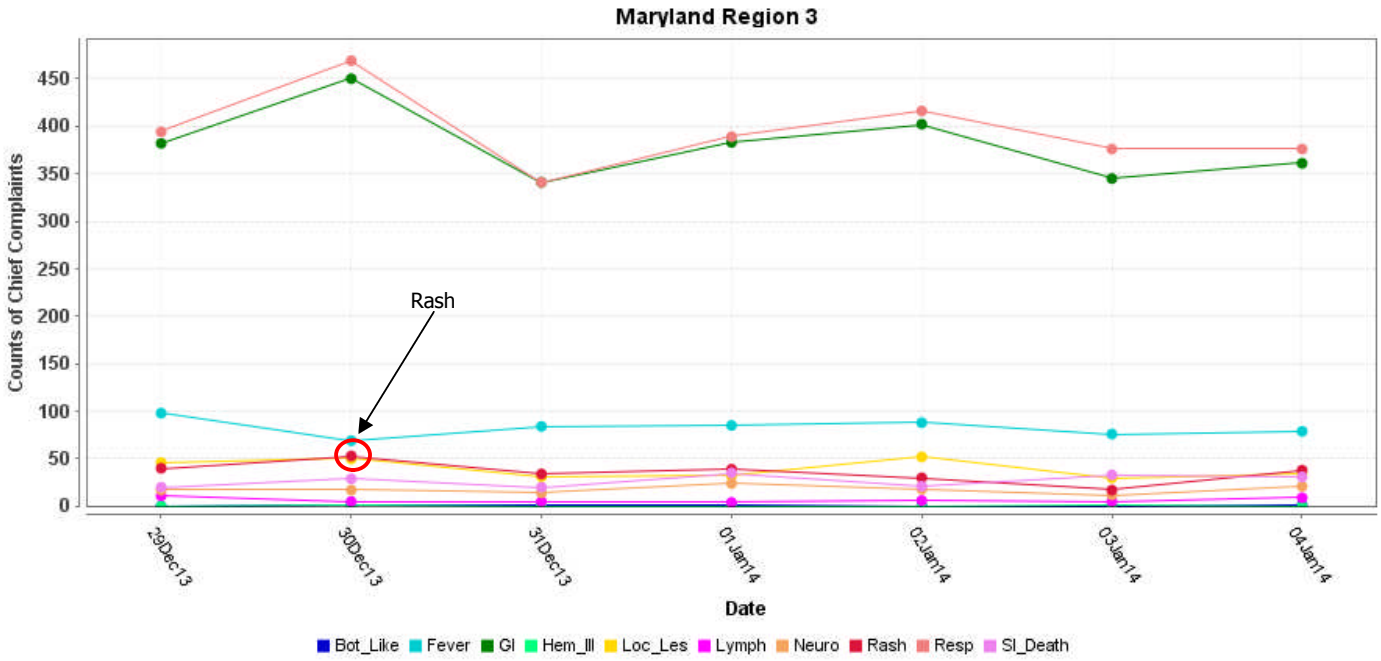


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

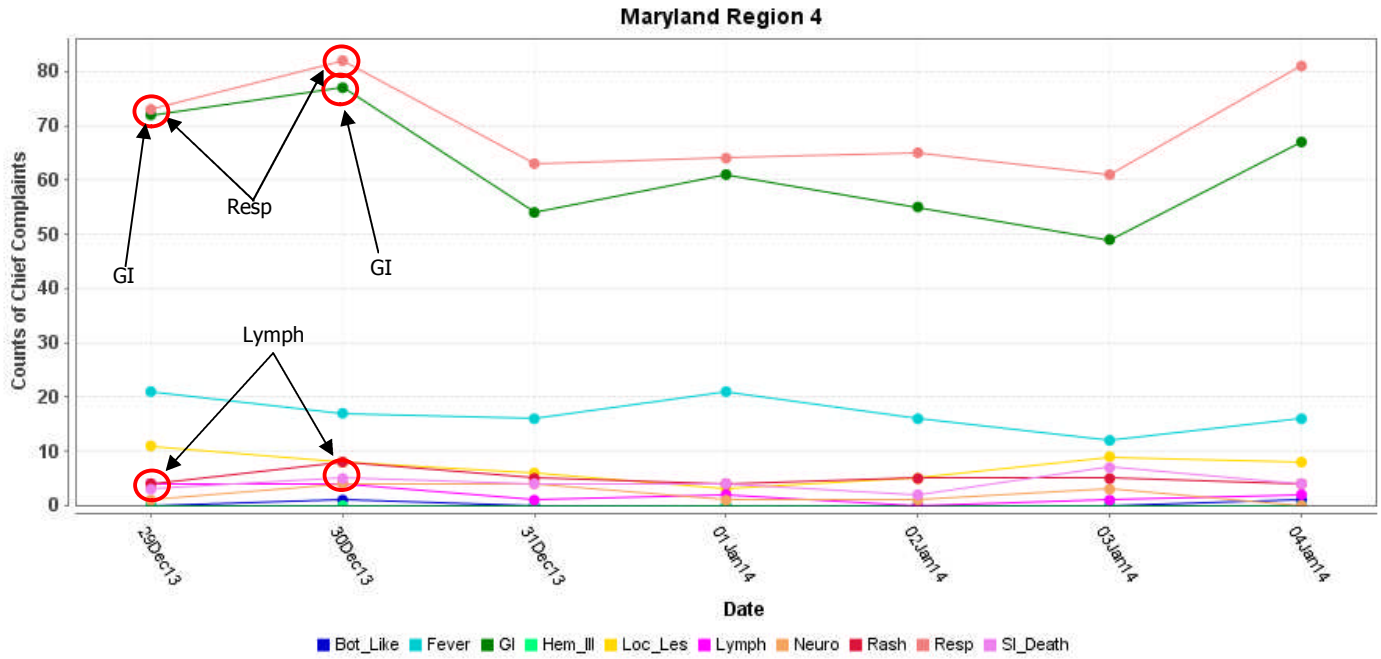
MARYLAND ESSENCE:



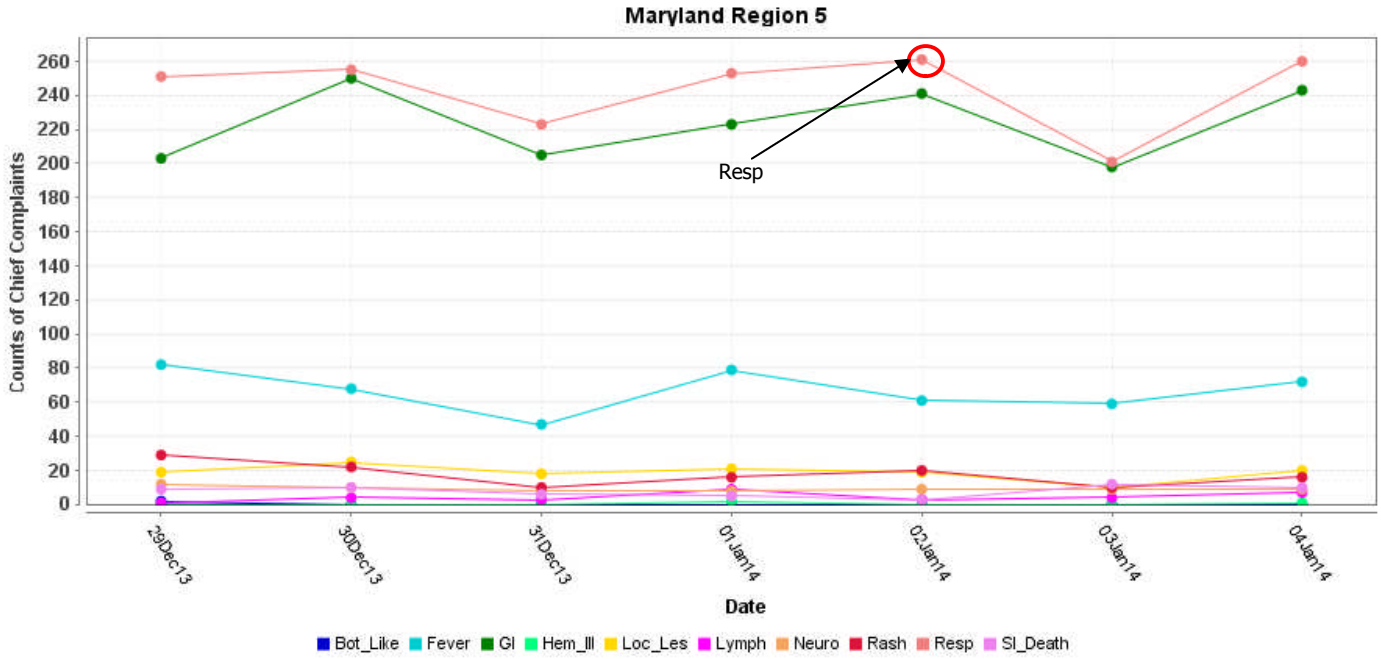
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



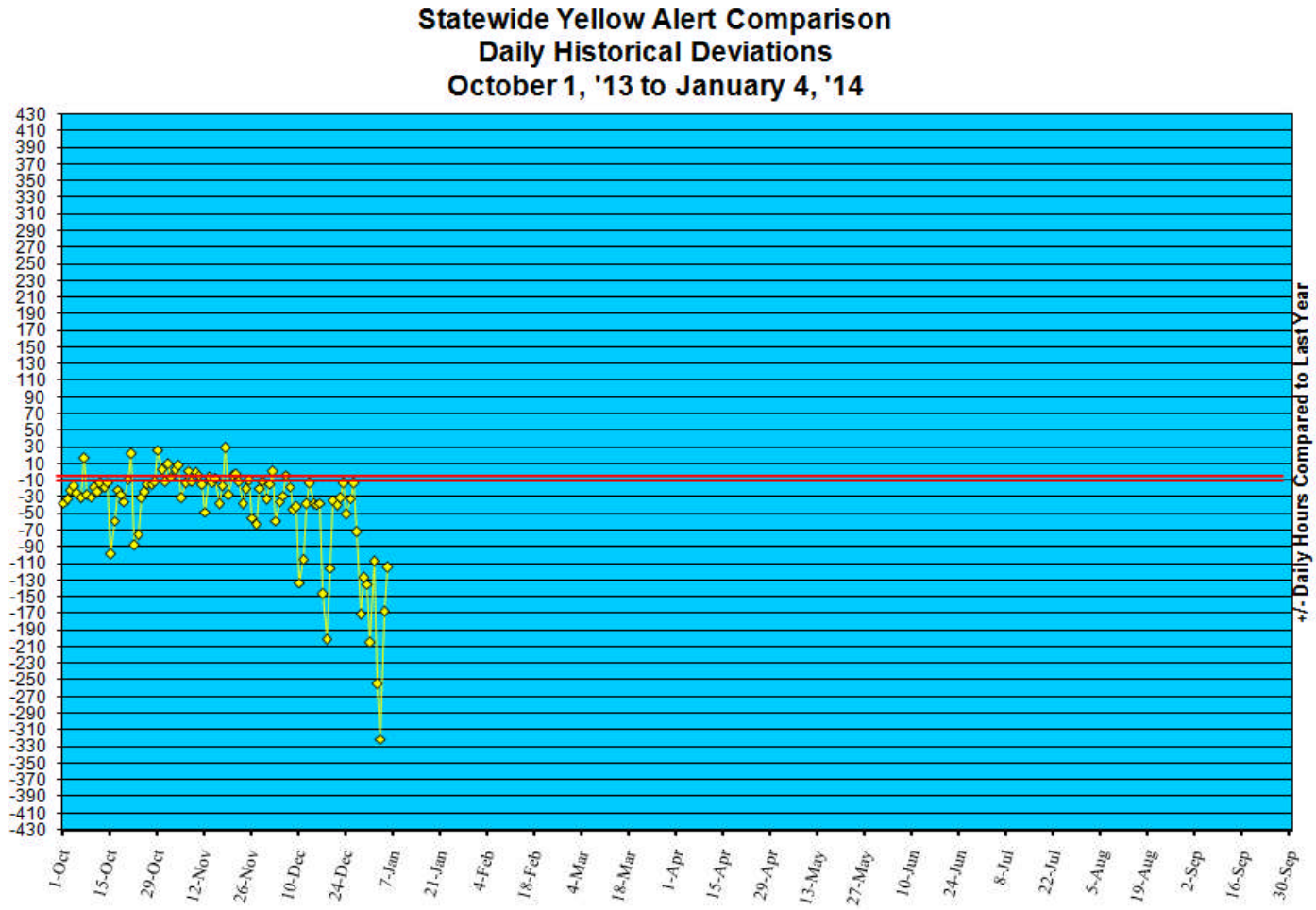
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (December 29, 2013 - January 4, 2014):	5	0
Prior week (December 22 - December 28, 2013):	4	0
Week#01, 2013 (December 31 – January 6, 2013):	9	0

4 outbreaks were reported to DHMH during MMWR Week 01 (December 29, 2013 - January 4, 2014)

2 Gastroenteritis Outbreaks
2 outbreaks of GASTROENTERITIS in a Nursing Home

2 Respiratory Illness Outbreaks
1 outbreak of ILI in a Nursing Home
1 outbreak of ILI/PNEUMONIA in a Nursing Home

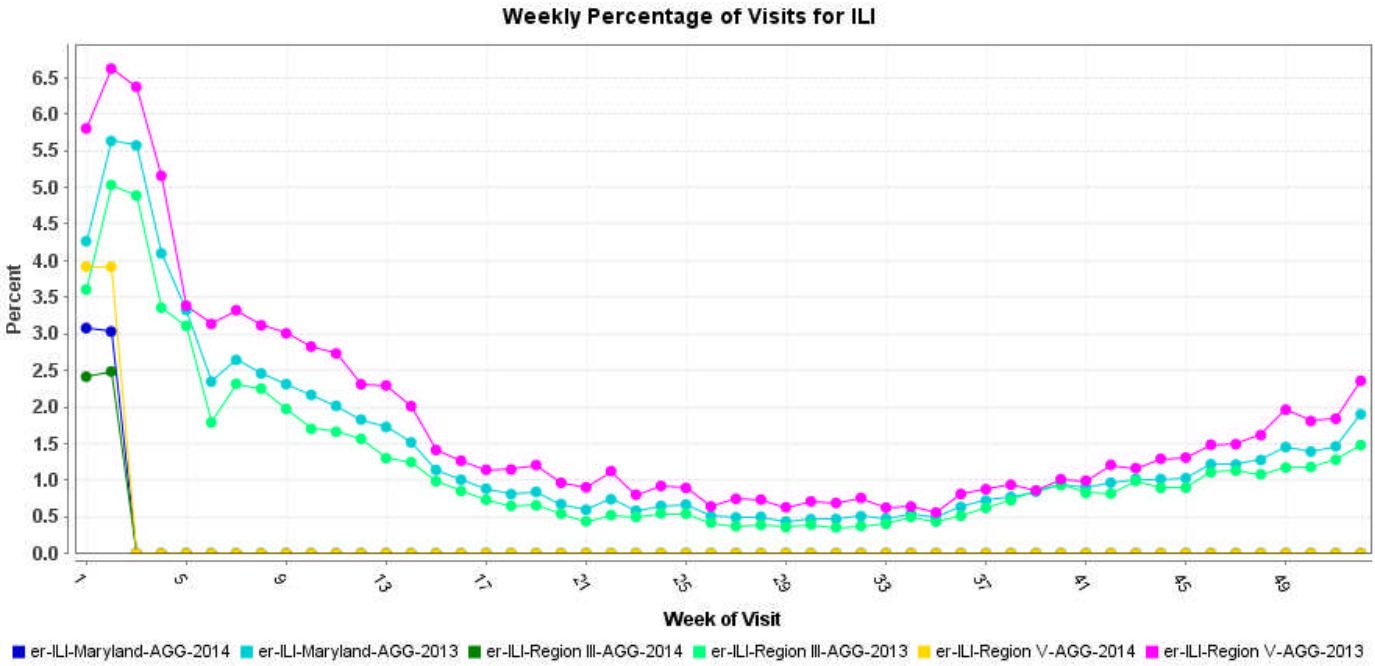
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 01 was: Regional Spread with Minimal Intensity

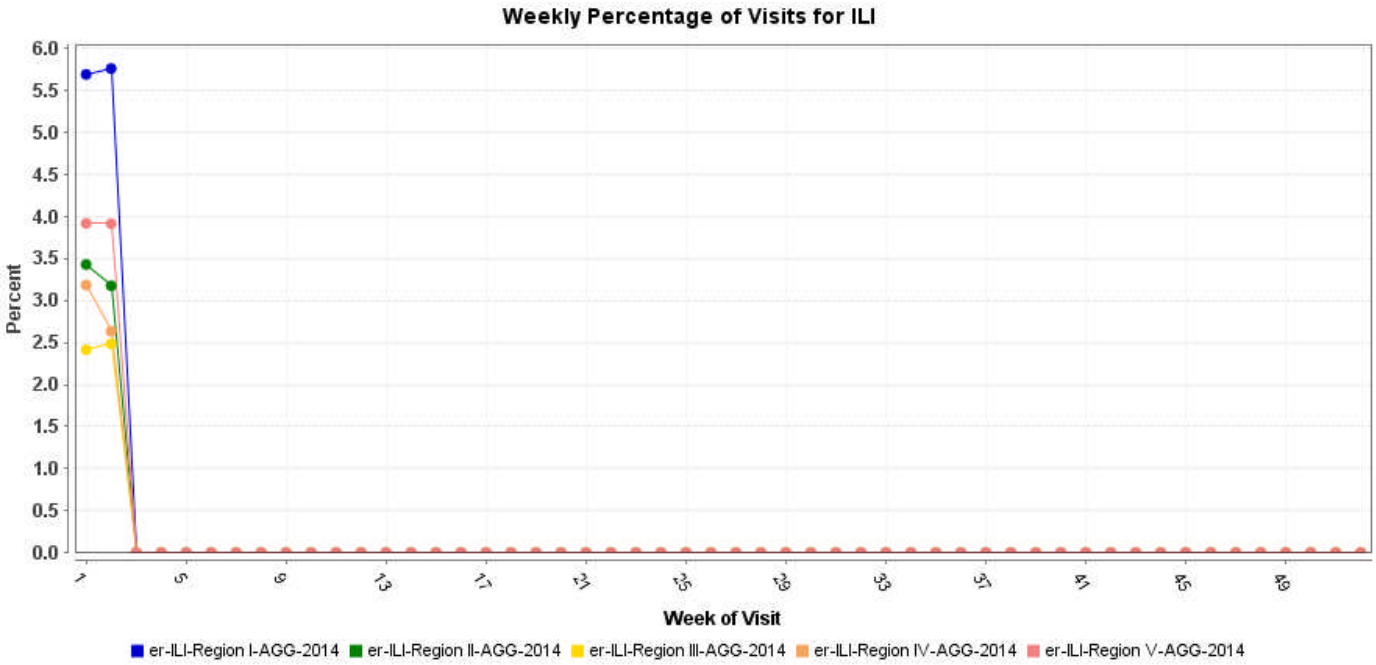
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



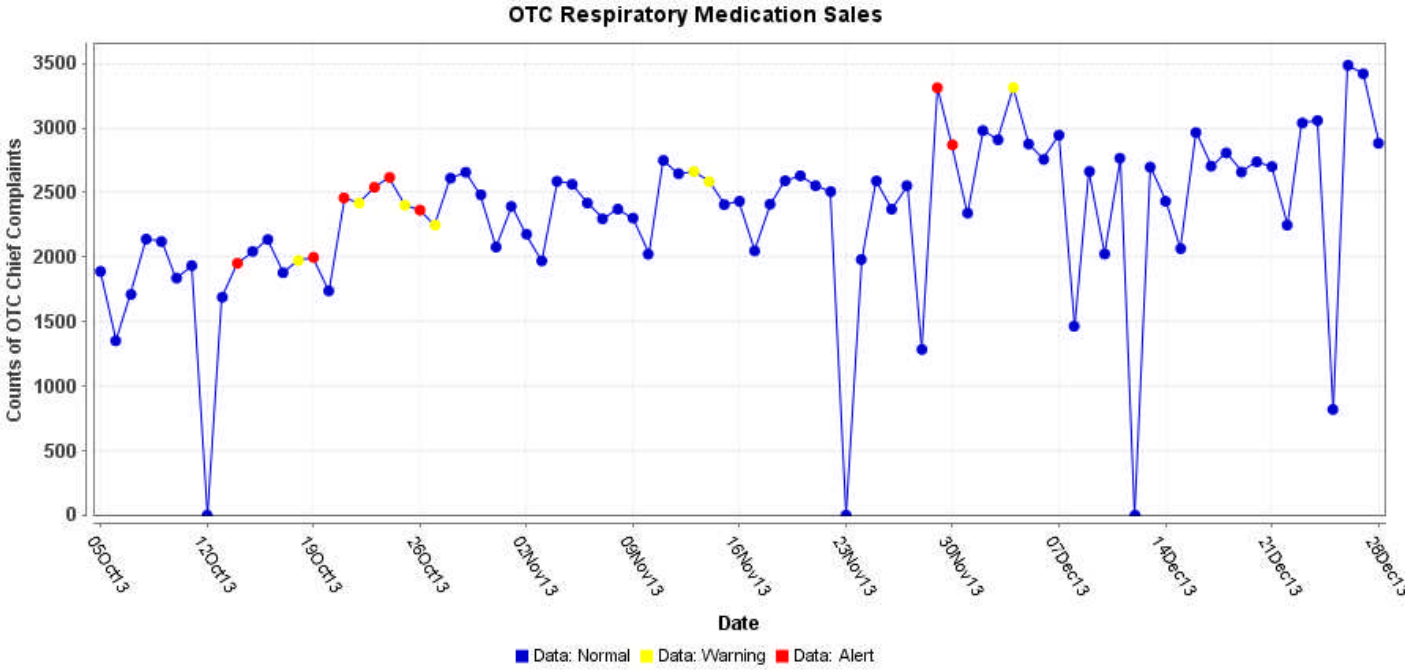
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of December 10, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 648, of which 384 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (H9N2): The Centre for Health Protection (CHP) of the Department of Health (DH) is, on 30 Dec 2013, investigating a confirmed human case of influenza A(H9N2) affecting a man aged 86. The patient is a Hong Kong resident living in Huangbeiling, Luohu, Shenzhen [Guangdong province]. He has underlying illnesses and has developed chills and cough with sputum since 28 Dec 2013. Upon entry at Lo Wu Border Control Point (BCP) on the same day, he was transferred by ambulance directly to the Accident and Emergency Department of North District Hospital (NDH), where he presented with low fever. He was then admitted to the isolation ward. He was transferred to Princess Margaret Hospital today [30 Dec 2013] for further management. His clinical diagnosis was chest infection. He has been in stable condition all along and is currently afebrile. His sputum specimen tested positive for influenza A(H9N2) virus upon testing by the CHP's Public Health Laboratory Services Branch. Investigations by the CHP revealed that the patient had no recent poultry contact, consumption of undercooked poultry, or contact with patients. His home contact in Shenzhen has remained asymptomatic. Over 50 health-care workers of NDH and the ambulance service have been put under medical surveillance.

NATIONAL DISEASE REPORTS*

SALMONELLOSIS (CALIFORNIA, NEVADA): 31 December 2013, California Department of Public Health (CDPH) Director and State Health Officer Dr Ron Chapman today, 31 Dec 2013, warned people not to eat cashew cheese products manufactured by The Cultured Kitchen because they may be contaminated with *Salmonella*. 15 cases of illnesses have been reported in the Western USA, with 12 of the cases occurring in California. 3 patients have been hospitalized and no deaths have been reported. The Cultured Kitchen of West Sacramento, California has initiated a voluntary recall of all flavors of its cashew cheese products with expiration dates on or before 19 Apr 2014, due to the risk of contamination. The products were sold in natural food stores throughout Northern California and Northern Nevada, and at farmers markets in Sacramento County. The cashew cheese products were sold in 8-ounce plastic containers in the following flavors: Herb, smoked cheddar, pepper jack, habanero cilantro lime, basil pesto and white cheddar. Photos of the recalled product labels are on the CDPH website (http://www.cdph.ca.gov/pubsforms/Documents/fdbFrCUL1a.pdf). While the cashew cheese products are no longer being sold at retail facilities, CDPH is concerned that consumers may still have some of these products in their homes. Consumers in possession of these recalled products should discard them or return them to the place of purchase for a refund. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *non-suspect case

INTERNATIONAL DISEASE REPORTS*

JAPANESE ENCEPHALITIS AND OTHER (INDIA): 30 December 2013, A 5-year-old child suspected to have encephalitis, a condition that causes inflammation of the brain, died in Bihar's Araria district Monday [30 Dec 2013], taking the toll from this disease to 8 in the last 10 days, officials said. Araria civil surgeon B.K. Thakur said that while one child died Monday [30 Dec 2013], there were others admitted to hospital with similar symptoms and who were in critical condition. Last week [23-29 Dec 2013], 2 children, a 4-year-old and a 6-year-old, died of the disease at Belwa panchayat near Araria town, officials said, and 5 children were earlier reported to have died in the district. Araria district magistrate Ajay Kumar Choudhury said preventive measures have been taken on a war footing since last week, after 5 children succumbed to encephalitis. A team of health experts from Patna [Bihar state] visited the affected village in Araria 3 days ago [27 Dec 2013], on a directive from Chief Minister Nitish Kumar, to oversee measures to check the spread of the disease. Encephalitis is an acute inflammation of the brain resulting either from a viral infection or when the body's own immune system mistakenly attacks brain tissue. Children and elderly people, whose immunity is low, are especially prone to fall prey to the disease. Till now, over 3 dozen children have died of encephalitis in the state this year [2013]. Last year [2012], the disease killed nearly 240 children in Muzaffarpur and Gaya districts of Bihar. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (AFRICA): 2 January 2014, At least 22 adults and 3 children have been confirmed dead, while some 600 others are infected following a fresh cholera outbreak in Kano State in northwestern Nigeria. An epidemiologist with the state's Infectious Diseases Hospital (IDH), Dr. Tijjani Hussaini, told journalists that the 3 children died in the early hours of Thu 2 Jan 2014. At least 20 persons are receiving treatment, while 5 were discharged. There are also over 40 men and women at the diarrhea treatment unit of the hospital," he said. Within the last month, an estimated 39 reported deaths caused by cholera occurred around the metropolitan city of Kano. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

MERS-COV (SAUDI ARABIA): 3 January 2014, On [31 Dec 2013], WHO has been informed of an additional laboratory-confirmed case of Middle East respiratory syndrome coronavirus (MERS-CoV) in United Arab Emirates. The case is a 33-year-old male healthcare worker in Dubai who was in contact with the confirmed MERS-CoV case reported to WHO on [20 Dec 2013]. He developed symptoms on [27 Dec 2013], and was hospitalized on [28 Dec 2013] with bilateral pneumonia, acute renal failure, and thrombocytopenia. The patient has underlying history of bronchial asthma and chronic kidney

disease. The case was laboratory confirmed for MERS-CoV on [29 Dec 2013]. The patient is in critical but stable condition. Globally, from September 2012 to date, WHO has been informed of a total of 177 laboratory-confirmed cases of infection with MERS-CoV, including 74 deaths. Based on the current situation and available information, WHO encourages all Member States to continue their surveillance for severe acute respiratory infections (SARI) and to carefully review any unusual patterns. Health care providers are advised to maintain vigilance. Recent travelers returning from the Middle East who develop SARI should be tested for MERS-CoV as advised in the current surveillance recommendations. Patients diagnosed and reported to date have had respiratory disease as their primary illness. Diarrhea is commonly reported among the patients and severe complications include renal failure and acute respiratory distress syndrome (ARDS) with shock. It is possible that severely immunocompromised patients can present with atypical signs and symptoms. Health care facilities are reminded of the importance of systematic implementation of infection prevention and control (IPC). Health care facilities that provide care for patients suspected or confirmed with MERS-CoV infection should take appropriate measures to decrease the risk of transmission of the virus to other patients, health care workers and visitors. All Member States are reminded to promptly assess and notify WHO of any new case of infection with MERS-CoV, along with information about potential exposures that may have resulted in infection and a description of the clinical course. Investigation into the source of exposure should promptly be initiated to identify the mode of exposure, so that further transmission of the virus can be prevented. People at high risk of severe disease due to MERS-CoV should avoid close contact with animals when visiting farms or barn areas where the virus is known to be potentially circulating. For the general public, when visiting a farm or a barn, general hygiene measures, such as regular hand washing before and after touching animals, avoiding contact with sick animals, and following food hygiene practices, should be adhered to. WHO does not advise special screening at points of entry with regard to this event nor does it currently recommend the application of any travel or trade restrictions. WHO has convened an Emergency Committee under the International Health Regulations (IHR) to advise the Director-General on the status of the current situation. The Emergency Committee, which comprises international experts from all WHO Regions, unanimously advised that, with the information now available, and using a risk-assessment approach, the conditions for a Public Health Emergency of International Concern (PHEIC) have not at present been met. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Zachary Faigen, MSPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: Zachary.Faigen@maryland.gov

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: Anikah.Salim@maryland.gov

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable